

## **CHAPTER 8. Recommended Regulatory Compliance Strategy: Demonstrating that the Ecosystem Restoration Program (ERP) Complies with Applicable State and Federal Laws, Regulations and Programs**

### **A. Overview of the ERP Compliance Discussion**

The regulatory compliance strategy discussed in this Chapter encompasses a varied set of actions that must be taken by ERP program managers to obtain regulatory agency approvals prior to initiating specific ERP actions. To get these permits/approvals, it will be necessary to demonstrate that the ERP meets the requirements and standards contained in applicable state and federal laws and regulations. Typically, compliance is achieved by obtaining: 1) necessary permits from agencies responsible for regulating specified activities (e.g. impacts to endangered species or regulated habitats, such as wetlands); and 2) environmental clearances (e.g. certification of CEQA and/or NEPA documents).

The ERP (Volumes I and II) identifies more than 700 restoration actions for consideration. Many, but not all, of these actions require approvals from other agencies. Some ERP actions that do require permits/environmental clearances may be covered adequately by the PEIR/PEIS and related approvals scheduled to be obtained prior to the beginning of Stage 1. The need for, and benefits and impacts of these actions is understood at a level of detail that justifies implementation during Stage 1. However, the overwhelming majority of actions proposed by the ERP, including actions that might be desirable during Stage 1, are not described in detail, and could not be implemented until they are reviewed within the adaptive management framework and additional permits and environmental clearances are obtained.

Recognizing the need to "stage" ERP and other CALFED implementation actions, the Strategic Plan discussion of regulatory compliance is presented in two parts. This Chapter addresses the issue of regulatory compliance with a broad, long-term perspective. It discusses the need for a long-term strategy and outlines the purposes of the strategy. It then reviews the key regulatory agencies that must issue permits/approvals for proposed ERP actions, describes how environmental documentation requirements should be addressed, and how the adaptive management approach can be embedded in the regulatory process to make it more efficient and defensible. Finally, a discussion of how implementation of the ERP and progress on the overall CALFED Program over the next 20 to 30 years needs to be "linked" to provide "assurances" for all interests that CALFED is doing what it said it would and that progress on program elements is reasonably balanced.

Chapter 9 focuses on Stage 1 of the staged implementation approach. It outlines a strategy for Implementing Stage 1 of the ERP and discusses the need to phase actions within Stage 1 based on the current ability to describe future actions, the limited understanding of impacts and expected benefits, and need to identify specific permitting and environmental

documentation requirements.

### **B. Need for a Compliance Strategy**

The need to comply with all applicable state/federal requirements represents a daunting challenge in view of the fact that the ERP identifies more than 700 actions intended to enhance, re-habilitate and restore the biological values and functions of the Bay-Delta and tributary areas within the CALFED study area. Restoration actions considered by the ERP as part of the adaptive management approach include, but are not limited to, acquisition of private lands and easements for ecosystem restorations purposes, enhancement and restoration of a variety of existing riverine, wetland and upland habitats, creation and/or re-creation of a variety of habitats, and specific measures designed to address the biological needs of species, particularly those species listed as "threatened" or "endangered" species under the state and federal ESAs dependent upon habitat included within the Delta.

The first thing that must be agreed on concerning the regulatory compliance issue is that a comprehensive, coordinated long-term "strategy" to address permitting and environmental documentation needs is necessary to successfully implement the ERP. A long-term strategy is necessary because of the hundreds of actions being considered by the ERP, the complexity of the regulatory process and the need to implement the ERP in stages over 30 years. The ERP must be implemented in "stages" that identify "linkages" between ERP actions and between ERP actions and non-ERP actions so that we know whether completing one action or making one decision is dependent on completion of other actions. Without a coordinated strategy, ERP managers will not be able to identify and understand the permit and environmental documentation requirements related to actions being considered, and they will not be to translate permitting and documentation needs into the adaptive management decision process far enough in advance of adaptive management decision points to be able to process and obtain permits in a timely fashion.

If an effective, comprehensive and long-term compliance strategy is not developed and carried out, the likely result would be unnecessary and, perhaps, irretrievable environmental impacts, loss of restoration opportunities, significant program delays, waste of public and private funding, and loss of public trust and confidence in the program.

### **C. Purposes of the Compliance Strategy**

With the above statement of need in mind, the ERP Compliance Strategy should be designed to accomplish the following purposes:

- Identify all state and federal agencies with CEQA/NEPA or permitting authority over activities included within the ERP that affect biological resources, including, but not limited to, USFWS, NMFS, CDFG, USEPA, USACE, SWQCB.

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- Identify specific permitting requirements and standards related to the laws/regulations administered by applicable permitting agencies, including, but not limited to, state and federal ESAs, the NCCP Act, federal Clean Water Act, and related regulations/codes.
- Provide a framework that will facilitate effective compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), recognizing the particular needs and options relating to the need to implement the ERP and CALFED Program in stages over 30 years.
- Identify proposed ERP actions in sufficient detail so that each action can be evaluated to determine: 1) needed regulatory and environmental clearances (many projects will require multiple approvals and permits; and 2) the specific location and character of the action so that potential impacts and benefits can be identified; 3) environmental impacts and feasible alternative actions and/or mitigation measures; and 4) linkages between specific ERP actions and; (a) other ERP actions, and (b) non-ERP actions within the overall CALFED program (e.g. levee protection, water supply, water quality, etc.). As used here a linkage refers to functional connections between proposed actions that could serve to enhance or be essential to the success of one or both actions. For instance, an action proposed to restore a wetland could be dependent on the availability of increased water quantities or qualities. Or, a proposed action could be contingent upon the completion of a particular research or monitoring program.
- Define and implement an adaptive management framework for ERP actions to: 1) evaluate and select actions to be undertaken during Stage 1 and subsequent stages; and 2) guide implementation of selected actions consistent with the adaptive management decision framework described in Chapter \_ and illustrated in Exhibit \_ (Framework for Adaptive Management).
- Based on the application of adaptive management principles and other relevant criteria, identify ERP actions that should occur in Stage 1 of the implementation process and, as necessary, determine whether actions proposed to occur in Stage 1 are adequately covered by the PEIR/PEIS and related certifications (e.g. the RODs). If necessary, develop a phasing plan for Stage 1 activities and decisions to assure that applicable permitting and environmental approvals are obtained and Stage 1 actions are implemented in a timely manner.
- At all stages of the CALFED implementation process, provide for integration of the ERP adaptive management approach with implementation of non-ERP CALFED actions by assuring consultation between ERP managers and other program managers early in the decisionmaking process for non-ERP actions that would impact significant biological resources or that are determined to be essential actions precedent to other proposed ERP or non-ERP actions (i.e. consultation should begin at the conceptual and early facility design/decision stages so that alternative solutions and assessments of the potential

impacts and benefits associated with a proposed action can be addressed prior to committing to specific solutions).

- Provide the basis for "assurances" to program participants and others affected by or interested in the ERP and CALFED, that ERP and other program elements are progressing in a reasonably balanced, timely and equitable manner capable of achieving CALFED restoration and other programmatic goals.

#### **D. Regulatory Programs and Reviewing Public Agencies**

An ERP Compliance Strategy designed to achieve the above purposes would enable program managers to obtain necessary state and federal permits and approvals in a timely manner, with a minimum of delays and wasted resources. Because of the scope of state and federal "regulatory" programs, it is important to begin by understanding that some regulatory agencies/programs are critical to the success of the ERP. The ERP compliance strategy focuses on species, habitat and ecosystem issues, including water quality. The recommended strategy identifies the state/federal agencies/programs that directly address these issues. Other regulatory programs are broadly related to ecosystem health (e.g. the Clean Air Act); however, the mitigation and management solutions for these programs do not directly complement or contribute to ERP restoration solutions and impacts. Therefore, permits and approvals involving agencies other than those discussed below are addressed as part of a strategy separate from the ERP Strategic Plan, recognizing that some of these approvals could delay ERP actions if they are not obtained in a timely manner (e.g. approvals involving potential impacts to cultural resources or air quality).

The state/federal regulatory systems involving water, wetlands and species protection are complex and a comprehensive discussion of applicable permits/approvals would be out of place in this document. The most involved state and federal agencies and related program requirements are addressed briefly at a level of detail designed to capture the range and complexity of requirements without becoming immersed in them. California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) requirements are addressed in the section following this discussion.

##### **1) State of California Regulatory Permits and Approvals**

Under California law the primary source of regulations and permitting authority for projects impacting biological and water resources is the Fish and Game Code (FGC, Division 3). The key laws and programs discussed below and designed to protect biological resources are codified in this Division (all references are to sections in the FGC):

California Endangered Species Act-This 1984 Act sets forth the state policy to "... conserve, protect, restore, and enhance any endangered or any threatened species and its habitat..."(Section 2052). Section 2081 authorizes "take" of endangered, threatened or candidate

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species under certain conditions through permits or memorandums of understanding. Section 2090 requires each state agency acting as a "lead" agency under CEQA to consult with the Department of Fish and Game to ensure that proposed actions are not likely to "jeopardize" continued existence of any endangered or threatened species.

Natural Community Conservation Act—Adopted in 1991, this Act is designed to encourage voluntary, collaborative public/private ecosystem protection efforts on a regional or subregional basis. It is aimed at protecting the natural communities that provide habitat for listed species (threatened and endangered) rather than focusing on species by species protection. A key benefit of the NCCP Act is its protection for unlisted species that otherwise could not be protected under existing state or federal ESAs. Sections 2825(c) and 2835 provide "take" authorization for listed and unlisted species addressed under NCCP plans prepared and approved in accordance with the terms of the Act.

Streambed Alteration Agreements—Sections 1601 and 1603 in the FGC address the protection of the fish and wildlife values of the state's rivers, streams and lakes. These sections of the Code require anyone proposing a project that would "... divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream or lake designated by the department ..." to notify and consult with CDFG to develop a proposal that is acceptable to CDFG and, in the opinion of CDFG, "... will not substantially adversely affect an existing fish or wildlife resource. ..."

Other Provisions of the FGC—In addition to the above provisions, implementation of the ERP will be required to address a variety of FGC sections dealing with wetlands protection, native plants, migratory birds, fish, waterfowl and a class of species identified as "fully protected species" under the Code. The latter species may involve potential conflict between the provisions of the "take" authorizations provided under sections 2081 and 2835 of the Code and other Code sections that pre-date the Section 2081 and Section 2835 provisions that prohibit take of species except for scientific purposes.

San Francisco Bay Conservation and Development Commission (BCDC)—Some ERP restoration, research-monitoring and management activities would involve impacts to lands/waters within the regulatory jurisdiction of the BCDC. These actions will require BCDC approval prior to implementation.

## 2) Federal Laws/Programs

The primary federal regulatory programs that will influence implementation of the ERP are the Endangered Species Act (FESA) and the Clean Water Act (CWA). These acts and their relevant programs are briefly discussed below.

Federal Endangered Species Act—This Act was adopted by Congress in 1973 and amended in 1982. With regard to endangered and threatened species, Section 9(1)(B) of the

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FESA declares that it is unlawful for any person to "take any such species within the United States or the territorial sea of the United States." However, Section 9 also provides for exceptions to this prohibition in accordance with the provisions contained in Section 7 (Federal Consultations) and Section 10 (Habitat Conservation Plans) of the Act. Sections 7 and 10, in combination with Section 4(d), provide the basis for permitting requirements that must be addressed by the ERP.

Section 7—Requires that any action "... authorized, funded, or carried out ..." by a federal agency cannot "... jeopardize the continued existence of any endangered species or threatened species or resulting the destruction or adverse modification of habitat such species which is ... determined to be critical ..." Under this Section, federal agencies "consult" with the USFWS and NMFS if the "consultation" indicates that endangered/threatened species may be impacted, a biological assessment is prepared by the agency, followed by a preparation of "biological opinion." The USFWS and NMFS must reach a "no jeopardy" decision before it can issue a permit to impact any listed species.

The majority of the ERP and other CALFED actions now being considered qualify as "federal" actions based on one of the three criteria cited in the Act (i.e. they are authorized, funded or carried out by a federal agency). Therefore, the majority of the actions proposed will need to meet the standards/requirements contained in this section of the Act and receive a "no jeopardy" determination by the USFWS/NMFS.

Section 10—Authorizes the preparation of habitat "conservation plans" (HCPs) for private interests or non-federal agencies. Historically, HCPs addressed individual species and their habitat. In the past 10 years, HCPs addressing the needs of multiple "listed" species and their related habitats have been prepared. In California, some of these have involved combining state NCCPs with the HCP to result in a joint HCP/NCCP. An HCP must meet requirements of Section 10 concerning content and specific findings by the Secretary of Interior. USFWS/NMFS review of Section 10 HCPs also involves an "internal" Section 7 Consultation.

Section 4(d)—For species listed as "threatened" (not endangered species), another provision contained within the FESA may need to be addressed as part of the regulatory strategy for the ERP. This Section declares that "... the Secretary shall issue such regulations as he deems necessary and advisable to provide for the conservation of such species ..." This provision has been interpreted to allow the USFWS/NMFS, in conjunction with a Section 10 programmatic review, to permit impacts to "threatened" species during preparation of HCPs under certain conditions and is used as part of the joint NCCP/HCP planning process in the state. NMFS recently listed the Central Valley Steelhead as a "threatened" species. It is possible that the ERP would be involved in carrying out the provisions of a future 4(d) Rule affecting steelhead.

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Federal Clean Water Act—Also known as the Federal Water Pollution Control Act, this Act was originally adopted by Congress in 1972 and amended thereafter to provide for a comprehensive system of rules/regulations designed to control water pollution. The CWA does not refer to wetland explicitly but case law uniformly defines wetlands of waters of the U.S. and treats filling of wetlands as a discharge into those waters subject to CWA requirements. The ERP and other CALFED program elements propose a variety of actions that will require placement of fill material what the CWA defines as “waters of the United States” and will have demonstrate compliance with CWA requirements. Two sections of the CWA are particularly relevant to the ERP and CALFED. Section 401 of the CWA addresses potential impacts to water quality (e.g. the levels of sediments, toxic and hazardous substances, nutrients or other pollutants in waters). Section 404 addresses protection of waters qualifying as “waters of the U.S.” that include wetlands. Both sections will require ERP to obtain permits/approvals from state and federal agencies. ERP actions requiring Section 404 permits and will require a Section 401 “certification” as a condition of issuance of the 404 permit.

Section 401 permits are issued by the State Water Resources Control Board (SWRCB) and its regional boards (RWQCBs) under authority delegated to the state by the CWA and oversight by the U. S. Environmental Protection Agency (USEPA). In addition to the normal permitting needs under Section 401, ERP and CALFED program managers will need to address the requirements of the “Clean Water Action Plan” (CWAP) now being formulated for the state. This plan is being prepared jointly by the SWRCB and U.S. Department of Agriculture to guide federal resource allocations for coordinated watershed protection. Many of the watersheds within the CALFED study area are designated as priority watersheds (Category 1, out of four categories) for protection and enhancement. Section 404 permitting authority rests with the U. S. Army Corps of Engineers (USACE) and, under certain circumstances, USEPA. The USACE regularly consults with USEPA, USFWS and state agencies during its deliberations on permit issues.

Rivers and Harbors Act—Certain restoration activities involving impacts to navigable waters, as defined by federal law, will require permits under Section 10 of the Rivers and Harbors Act in addition to 404 permits. Projects involving impacts to navigable waters are regulated by the USACE and permit applications for actions in this category will be reviewed and acted by USACE concurrent with applications under Section 404 of the Clean Water Act.

#### **E. Environmental Documentation Approach**

The CALFED Bay Delta Program is a joint state and federal program. Therefore, evaluation of the potential environmental impacts associated with ERP actions and other CALFED components must be conducted jointly in accordance with the requirements of both the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). Under CEQA these documents are referred to as impact “reports” (EIR) while under NEPA they are called impact “statements” (EIS). To address this need, CALFED Program has prepared a Draft Programmatic Environmental Impact Statement/Environmental Impact Report (EIS/EIR).

**1) Program Implementation Under a Programmatic EIS/EIR**

As noted in prior discussions of ERP implementation, staged implementation is necessary because of the complexity of the Bay-Delta system, limits on available scientific data, and an inability to predict future events and how the ecosystem will respond to specific ERP actions. For these reasons, and because most program actions being considered are not yet precisely defined, CALFED elected to prepare a "programmatic" environmental document. The Draft PEIS/PEIR (p. 1-9) explains that it describes and evaluates the potential environmental consequences of actions at a programmatic level of detail rather than at a site-specific level of detail. The Draft PEIS/PEIR goes on to state (p. 1-10) that it is intended to "... support the selection of a preferred program alternative rather than the selection of a specific action." As a result, the scope of environmental documentation covered by the Draft PEIS/PEIR limits the number of specific ERP actions that can be implemented without completing additional environmental documentation.

The CEQA Guidelines (section 15168) identify a number of advantages to using a "programmatic" environmental document for large, complex projects where individual actions may be linked geographically or functionally. Advantages cited include: 1) providing a future occasion for more exhaustive consideration of effects and alternatives; 2) ensuring consideration cumulative impacts that might be missed in a project by project analysis; 3) avoiding duplicative reconsideration of basic policies; and 4) allowing the lead Agency to consider broad policy alternatives and programwide mitigation measures early, and with greater flexibility.

Consistent with the language in the Guidelines, the Draft PEIS/PEIR proposes that "second tier" or "site specific environmental documents" be prepared for individual projects after the Final PEIS/PEIR is certified. The concept of "tiering" or "nesting" subsequent environmental documentation and approvals based on a program level document is consistent with both CEQA and NEPA. Thus, the programmatic EIS/EIR could be used as a basis for simplifying the task of preparing future environmental documents. For instance, policy level decisions and impacts addressed under the PEIS/PEIR generally need not be re-examined, but specific ERP actions that were not addressed in the program document could be the subject of an "Initial Study" or "Environmental Assessment" to determine whether the proposed action could have significant environmental effects not previously considered. If the initial study/environmental assessment determines that significant effects not previously reviewed might occur, the basic environmental documentation found in the programmatic document could be incorporated by reference to address regional influences and secondary and programmatic level effects, while the scope of the subsequent document could be focused on significant new impacts. At this time, proposed actions are not sufficiently defined and potential consequences of future actions are not adequately understood for the Strategic Plan to recommend a specific documentation strategy. More information is needed.

**A) First Priority: Identification of Precise Actions and Environmental Documentation Needs**



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Therefore, a first priority for program managers should be to develop a systematic approach for preparing and compiling project descriptions (precise descriptions of proposed actions) and assessments of information needs. Preparation of environmental documents under CEQA/NEPA involves considerable time, generally ranging from a few months for a "negative declaration" and "finding of no significant impact" to more than a year for a relatively simple EIR/EIS and longer for more complicated projects. Therefore, from an implementation perspective, one of the most important tasks for the ERP is to develop a systematic approach for tracking actions being considered for implementation and identifying future environmental documentation needs for each action far enough in advance of needed permit approvals (see prior discussion on permitting) to allow the action to be reviewed and approved by regulatory agencies without creating unnecessary delays related to missing or inaccurate environmental documentation.

The adaptive management decision framework will become an important tool for enabling ERP program managers and others to identify information needs in a timely manner. Under the adaptive management framework, program managers can periodically scope out information needs for specific projects at several stages of the decisionmaking process (see Figure \_\_, Framework for Adaptive Management Planning). The first review may occur when an action is precisely defined and considered for selection as a recommended ERP action. Subsequent opportunities occur prior to or concurrent with the modeling and research steps in the adaptive management process. The point is, program managers will have the opportunity to track individual ERP actions and identify information needs with increasing precision as part of the adaptive management process. Failure to take advantage of the opportunities offered under the adaptive management framework for early identification of information needs will result in unnecessary expenses and delays.

**B) A Case Study: Integrating Adaptive Management with the Compliance Strategy for the Deer Creek Study Area**

**THIS SECTION WILL BE ADDED TO THE FINAL  
VERSION OF THE STRATEGIC PLAN.**

**F. Staged ERP Implementation and Provision for "Assurances"**

One of the most challenging aspects of the CALFED process for the ERP involves the need to maintain a reasonable "balance" in terms of progress in completing ERP actions and progress in completing actions in other components of the CALFED Program. After the PEIS/PEIR is certified and the USFWS and other agency Record of Decisions (RODs) are prepared, program participants will be monitoring program implementation to determine whether it is being implemented and operated as agreed. Water users have made it clear that it would not be acceptable for CALFED to spend a billion dollars on restoration without the water operating rules being defined for users and water conveyance and storage alternatives resolved. Other

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interests have been equally adamant in declaring that decisions must not be made on the same issues without sufficient progress on the ERP and adaptive management.

### 1) The Need to Define "Adequate Progress" Among Program Elements

Virtually all parties agree that for CALFED to succeed, there must be some degree of "symmetry" or balance in terms of progress among Program elements. Unfortunately, there is no common understanding of what constitutes "adequate" progress for any specific component, let alone for comparing progress on the ERP with other components, such as water supply reliability (including conveyance and storage). Therefore, during staged implementation of CALFED and ERP actions, there is a critical need to:

- identify measurable levels of progress (i.e. thresholds) toward restoration and other program goals;
- identify tools capable of facilitating attainment of identified performance thresholds; and
- link ERP progress to attaining measurable progress (threshold decisions or performance levels) for other program components such as financing, governance, water project operating rules, water storage and conveyance, water quality, and levee protection.

Facilitating attainment thresholds could involve developing specific tools, in the form of incentives, or alternative solution pathways (e.g. funding for water purchases) that would contribute to meeting performance standards and maintaining incentives for all parties to stay involved at each stage of the implementation process.

These tools are not available now; therefore, a primary "compliance" objective during Stage 1 should be to formulate such incentive and solution options. Preferably, these tools would be developed before any decisions on major program features, such as conveyance or surface storage alternatives. At a minimum, they should be developed concurrent with a final decisions on the preferred program alternative.

### 2) Significant Compliance and Assurance Milestones

The ability of the ERP to address endangered species requirements under the ESAs (state and federal) and the overall ecosystem restoration goals are in many ways entwined with other CALFED-Program element performance. Therefore, this discussion attempts to provide an initial look at other elements in an effort to preliminarily identify those interrelationships.

The CALFED solution is based in part on the expectation that the current Bay-Delta flow standards and operating rules would be extended for 7 years, or through the Stage 1. Certification of the Final PEIS/PEIR and issuance of the ROD(s) for the overall CALFED Program would provide the basis for the extending the Accord. With this basic premise in mind,

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and as a lead to the Chapter 9 discussion of Stage 1 implementation issues and priorities, it is useful to consider examples of measurable thresholds (decision points) and discuss the kinds of compliance decisions, assurances and information needs that may need to be addressed as part of a staged implementation program at these points. In particular, the "assurances" discussion should focus on those concerns that could be incorporated into and addressed as part of the Section 7 programmatic consultation for the CALFED program, with emphasis on: (1) the linkage between operations and environmental assurances for the duration of the Stage 1 implementation program; and (2) assurances regarding information needs and decisionmaking that would affect specific program elements under future Section 7 consultations.

Given the wide array of potential CALFED activities that may be undertaken during Stage 1, it is helpful to define categories of assurances that relate to the broader implementation program and assurances that relate to specific future activities. The following analysis represents an initial effort at defining distinct categories of assurances and assurance considerations that need to be resolved prior to the Programmatic ROD and in relation to ESA Section 7 Consultation(s).

**A) Programmatic Assurances for Environmental and Operations Linkages During the Stage 1 Implementation Program**

Two types of programmatic considerations need to be addressed. The first category comprises assurances required to extend the Bay-Delta Accord for the duration of the Stage 1 implementation effort without any change in the current Bay-Delta standards and rules. The second category of programmatic considerations involves procedures that would be followed in the event of a significant decline in the population(s) of ESA listed species that could potentially lead to a "re-initiation of consultation" under the ESA Section 7 regulations.

**i) Extension of the Current Bay-Delta Accords**

Clearly, an extension of the Bay-Delta Accord is critical to providing certainty and stability for the Stage 1 implementation program. However, there may be questions regarding the effectiveness of the current standards in the Accord for purposes of assuring "no jeopardy" to state/federal-listed species.

Any changes in the substantive provisions of the Bay-Delta Accord would have a major impact on the interests of all stakeholders. For instance, any change in the "Export-Inflow Ratio" ["E-I Ratio"] designed to protect fisheries resources during the months of February through June could have significant impacts on water supply opportunities. According to the Phase II Interim Report, "for Alternative 1 and 2, more protective E-I ratios can have significant water supply impacts in both the critical period and the longer average period" (Phase II Interim Report, p. 19). The Phase II report notes that "without new storage, average annual critical period supply decreases by about 400 TAF under Alternatives 1 and 2 with the more protective E-I ratios in place" while "the net average annual critical period supply benefit of the new

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storage with the more protection E-I ratios in place is only about 350 TAF, compared to a net benefit of about 650 TAF with existing E-I ratios in place" (p. 19).

Extension of the current Bay-Delta Accord would provide certainty for all elements of the Stage 1 implementation program, including the ERP. Essential elements of an Accord extension could include the following:

- The outcome of the current chinook salmon proposed listing;
- Confirmation that the current E-I ratio and other Bay-Delta substantive standards are consistent with ESA requirements;
- Adoption of a coherent, Stage 1 ERP implementation program that: (1) provides measurable benefits for listed species; (2) tests important hypotheses necessary to make future decisions regarding ERP restoration priorities and phasing; and (3) provides for ecosystem level benefits on major streams and tributaries;
- Adoption and implementation of an adaptive management program for the ERP that includes a peer-reviewed set of ecological indicators both for listed species and for broader ecosystem changes.
- Firm assurances regarding water supply necessary to carry out Stage 1 ERP measures and steady progress toward identifying sources and acquiring water supplies necessary for ERP implementation after Stage 1.
- A specific budget for Stage 1 ERP implementation and an ERP accounting model both for tracking fund inflows and outflows with an annual accounting report assessing "reasonable further progress."

**ii) Assurances Regarding Re-Initiation of Section 7  
Consultation during Stage 1.**

The recent federal rule-making for the Section 10 "No Surprises" Policy indicates that federal agencies have a continuing species conservation obligation under Section 7. The types of assurances available under Section 10 of the ESA are not available with respect to commitments where federal agencies fund, authorize or undertake discretionary lead agency actions. Since the ESA Section 7 regulations contain provisions requiring the re-initiation of Section 7 consultations under certain circumstances involving significant declines in listed species, it is useful to address such a possibility by considering a set of workable assurances for the overall CALFED Stage 1 implementation program.

The USFWS and NMFS are the agencies with the authority to define procedures relating to the future re-initiation of Section 7 consultation. However, the CALFED program should consider formulating procedures for consideration in conjunction with the Section 7 consultation

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for Stage 1 implementation. As an example, these procedures could include actions that could be undertaken when population levels of specific listed species fall below pre-defined "threshold" levels and prior to a decision by federal agencies to re-initiate consultation:

- Immediate use of standby water supply contracts obtained by stakeholders to provide supplemental fisheries water supplies where such water supplies can benefit a species in decline;
- Other corrective action measures, undertaken under the purview of a "short-term corrective action program" approved by the state and federal resources agencies, using water under the control of the ERP program or stakeholders in the CALFED program, including re-direction of ERP acquired water supplies, the use of CVPIA (b)(2) water or changes in water supply/conveyance operations;
- If, and only if, corrective action failed to achieve measurable and significant species benefits within a timeframe established by the "short-term corrective action program," would formal Section 7 re-initiation of consultation occur.

#### **B) Specific Assurances for CALFED Program Elements**

The following assurances address unique attributes of specific CALFED Program Elements. These assurances illustrate the types of considerations that may be involved in finalizing a set of assurances for each Program element. They also illustrate how to incorporate assurances into a ROD to provide a basis for a Section 7 programmatic consultation and Biological Opinion conditions capable of covering the CALFED Stage 1 Implementation Program.

##### **1. Water Supply Management Options Relating to ESA-Listed Species Assurances**

- The latest CALFED staged decision-making document states that "due to regulatory requirements, the major financial commitments, and the potential environmental impacts, new surface storage requires special consideration." It further states: "CALFED believes more efficient use must be made of existing water supplies system-wide prior to building new surface storage" and that, "in addition, there must be enhanced opportunities for water transfers prior to building new surface storage."

Accordingly, stakeholder and CALFED assurances relating to ESA-listed species could include defining a specific water acquisition program for ERP implementation, including: alternatives considered in the CVPIA analysis, and the extent to which water efficiency and water transfer market performance standards must be met prior to final decisions on specific water storage and related conveyance proposals;

- Define a process whereby the considerations outlined immediately above will be related

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to each of the following concerns as decisions on water supply management options are finalized:

(1) South Delta Improvements appear to provide the potential for operational flexibility that could benefit state/federal listed species with or without any long-term increase in water supply exports from the Delta. Assurances regarding final decision-making for such facilities should include defining the information needs and decision-making process for assessing benefits to state/federal listed species resulting from South of Delta storage operations with and without the proposed SWP/CVP intertie under current Export-Inflow Ratio standards, the "more protective E-I ratio" standard outlined in the Phase II Interim Report and scenarios involving increased exports. The decision-making process should include provisions for incorporating relevant factors relating to the final decisions under the current chinook salmon proposed listings. Construction of new South of Delta storage and the SWP/CVP intertie would likely be keyed to assured ERP water supply contracts and operations modifications for dry periods and critically dry periods affecting ESA listed species.

(2) North of Delta Water Storage improvements rely heavily on increasing fisheries and other riverine/estuarine habitat benefits for their justification. However, the Phase II Interim Report states that the "validity and appropriate role for 'time value of water' concept in California water management have not been fully discussed within the broader stakeholder and scientific communities" and "[A]dditional work remains to identify and resolve controversy related to the concept, determine specific parameters (flow rates and timing), and scientifically evaluate the potential effects of this approach." Assurances relating to ESA-listed species for all stakeholders and CALFED would likely involve defining: (a) the scope of scientific analysis of potential peak flow diversions on the geomorphology of riverine systems, including those of importance to ESA listed species; (b) a comparison of new storage with operations modifications, b-2 water use scenarios and water acquisition alternatives considered in the current CVPIA EIS; (c) projected timing, cost and operational flexibility considerations of North of Bay-Delta water storage options in relation to other means of increasing water supply for ERP purposes.

## 2. Conveyance Alternatives Related to ESA-Listed Species Assurances

CALFED states that "at this time, CALFED cannot rule out the potential need for a dual conveyance facility to achieve its mission" but that "neither can it conclude, based upon current information, that the facility is necessary for fulfilling that mission." CALFED also notes that, due to the long lead time, "the existing Delta channels must be used almost exclusively for a minimum of 10 years" even if a decision is ultimately made to proceed with an isolated facility conveyance option. Thus, there would be a 10 year period within which ERP contributions to the health of listed species could be measured and during which the potential contributions of future ERP implementation stages could be more effectively addressed. Whether or not

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CALFED chooses an "on-ramp" or "off-ramp" approach, the key criteria should be identified/designed that would be applied in deciding whether to build an isolated facility. It is likely that a final decision on an isolated facility alternative would require a Section 7 consultation; therefore, CALFED should consider including "decision criteria" for consideration as part of the Section 7 consultation for Stage 1 implementation to provide an information base and increased predictability for a future Section 7 consultation on the isolated facility. The Section 7 "decision criteria" for Stage 1 might include the following:

(a) Definition of listed species habitat evaluation criteria that would be used to assess the success of ERP Stage 1 implementation and the likely success of future ERP implementation stages.

(b) Evaluation of the status of the Anadromous Fish Restoration Plan implementation program undertaken pursuant to CVPIA statutory obligations to take reasonable measures to double the populations of anadromous fishes many of which are ESA listed species.

(c) Evaluation of measures available to achieve or make substantial progress toward the recovery of listed species dependent upon the Delta.

### 3. Levee Improvements Assurances Relating to ESA-Listed Species

Many levee improvements will require Section 7 consultation under the Rivers and Harbors Act and/or Clean Water Act 404 permit programs. Listed species may be affected, and, if so, Section 7 consultation provisions would be triggered. Additionally, listed species considerations could be involved in any 404(b)(1) practicable alternatives analysis. To the extent that specific levee improvements can be incorporated into the Section 7 consultation for the CALFED Stage 1 implementation program, assurances should be provided as to whether or not the Section 7 consultation would cover the aforementioned regulatory programs. To the extent that specific levee improvements are not covered, the programmatic Section 7 consultation should at least define the parameters for future Section 7 consultations for specific improvements.

### 4. Flood Control Issues and Current Corps Studies

Many ERP alternatives involve modifying prior flood control measures to improve stream geomorphology conditions for purposes of enhancing anadromous fisheries habitats. However, specific flood control planning will be required. Any ERP-related flood control issues, including specific hydrology studies for island restoration within the Bay Delta itself, should be specifically identified and ESA-species concerns identified as part of the programmatic Stage 1 Section 7 consultation to provide greater certainty for subsequent site-specific consultations related to future flood control-related activities.

### 5. CVPIA EIS and Trinity Diversion EIS Considerations

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The federal government is currently engaged in major environmental analyses in relation to CVPIA statutory mandates and proposed enhancement of Trinity River flows for anadromous fisheries. Any commitments made pursuant to these two EIS reviews should be correlated with assurances considered and provided in conjunction with a CALFED programmatic consultation.

**G. Conclusion**

Chapter 8 has provided a wide ranging description of a long-term regulatory compliance strategy for the ERP. In doing so, it has attempted to capture the scope and variety of issues that must be addressed as the ERP and CALFED are implemented in stages over 30 years. Hopefully, the discussion of linkages and assurances that bind the ERP to other elements of the Program is useful. It is difficult, if not impossible, to draw hard lines separating the ERP from other elements of CALFED. It is nearly as difficult to separate the issue of assurances from the compliance strategy. The interrelatedness of CALFED program problems and solutions across program boundaries is pervasive and, ultimately, commands attention.

The following Chapter steps away from the long-term focus and addresses a strategy for Stage 1 of the ERP. Stage 1 begins to implement adaptively managed restoration and should provide a sound foundation for, and effective transition to, subsequent stages of the ERP.